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OIPE

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/928,198

DATE: 08/23/2001

TIME: 14:41:04

Input Set : A:\ES.txt

Output Set: N:\CRF3\08162001\I928198.raw

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5 <110> APPLICANT: James A. Hoffmann and Jirong Lu  
7 <120> TITLE OF INVENTION: FSH FORMULATION  
9 <130> FILE REFERENCE: X12383N Sequence Listing  
C--> 11 <140> CURRENT APPLICATION NUMBER: US/09/928,198  
C--> 12 <141> CURRENT FILING DATE: 2001-08-10  
14 <150> PRIOR APPLICATION NUMBER: 60/093906  
15 <151> PRIOR FILING DATE: 1998-07-23  
17 <150> PRIOR APPLICATION NUMBER: 60/094611  
18 <151> PRIOR FILING DATE: 1998-07-30  
20 <150> PRIOR APPLICATION NUMBER: 60/094767  
21 <151> PRIOR FILING DATE: 1998-07-31  
23 <150> PRIOR APPLICATION NUMBER: 60/098711  
24 <151> PRIOR FILING DATE: 1998-09-01  
26 <150> PRIOR APPLICATION NUMBER: 60/100696  
27 <151> PRIOR FILING DATE: 1998-09-17  
29 <160> NUMBER OF SEQ ID NOS: 20  
31 <170> SOFTWARE: PatentIn Ver. 2.0  
33 <210> SEQ ID NO: 1  
34 <211> LENGTH: 96  
35 <212> TYPE: PRT  
36 <213> ORGANISM: mammalian  
38 <400> SEQUENCE: 1  
39 Phe Pro Asp Gly Glu Phe Thr Met Gln Gly Cys Pro Glu Cys Lys Leu  
40 1 5 10 15  
42 Lys Glu Asn Lys Tyr Phe Ser Lys Pro Asp Ala Pro Ile Tyr Gln Cys  
43 20 25 30  
45 Met Gly Cys Cys Phe Ser Arg Ala Tyr Pro Thr Pro Ala Arg Ser Lys  
46 35 40 45  
48 Lys Thr Met Leu Val Pro Lys Asn Ile Thr Ser Glu Ala Thr Cys Cys  
49 50 55 60  
51 Val Ala Lys Ala Phe Thr Lys Ala Thr Val Met Gly Asn Val Arg Val  
52 65 70 75 80  
54 Glu Asn His Thr Glu Cys His Cys Ser Thr Cys Tyr Tyr His Lys Ser  
55 85 90 95  
61 <210> SEQ ID NO: 2  
62 <211> LENGTH: 111  
63 <212> TYPE: PRT  
64 <213> ORGANISM: mammalian  
66 <400> SEQUENCE: 2  
67 Arg Ser Cys Glu Leu Thr Asn Ile Thr Ile Thr Val Glu Lys Glu Glu  
68 1 5 10 15  
70 Cys Gly Phe Cys Ile Ser Ile Asn Thr Thr Trp Cys Ala Gly Tyr Cys  
71 20 25 30  
73 Tyr Thr Arg Asp Leu Val Tyr Arg Asp Pro Ala Arg Pro Asn Ile Gln  
74 35 40 45  
76 Lys Thr Cys Thr Phe Lys Glu Leu Val Tyr Glu Thr Val Lys Val Pro  
77 50 55 60

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79 Gly Cys Ala His His Ala Asp Ser Leu Tyr Thr Tyr Pro Val Ala Thr
80 65 70 75 80
82 Glu Cys His Cys Ser Lys Cys Asp Ser Asp Ser Thr Asp Cys Thr Val
83 85 90 95
85 Arg Gly Leu Gly Pro Ser Tyr Cys Ser Phe Arg Glu Ile Lys Glu
86 100 105 110
89 <210> SEQ ID NO: 3
90 <211> LENGTH: 96
91 <212> TYPE: PRT
92 <213> ORGANISM: mammalian
94 <400> SEQUENCE: 3
95 Phe Pro Asp Gly Glu Phe Thr Thr Gln Asp Cys Pro Glu Cys Lys Leu
96 1 5 10 15
98 Arg Glu Asn Lys Tyr Phe Phe Lys Leu Gly Val Pro Ile Tyr Gln Cys
99 20 25 30
101 Lys Gly Cys Cys Phe Ser Arg Ala Tyr Pro Thr Pro Ala Arg Ser Arg
102 35 40 45
104 Lys Thr Met Leu Val Pro Lys Asn Ile Thr Ser Glu Ser Thr Cys Cys
105 50 55 60
107 Val Ala Lys Ala Phe Ile Arg Val Thr Val Met Gly Asn Ile Lys Leu
108 65 70 75 80
110 Glu Asn His Thr Gln Cys Tyr Cys Ser Thr Cys Tyr His His Lys Ile
111 85 90 95
117 <210> SEQ ID NO: 4
118 <211> LENGTH: 111
119 <212> TYPE: PRT
120 <213> ORGANISM: mammalian
122 <400> SEQUENCE: 4
123 Asn Ser Cys Glu Leu Thr Asn Ile Thr Ile Ala Val Glu Lys Glu Gly
124 1 5 10 15
126 Cys Gly Phe Cys Ile Thr Ile Asn Thr Thr Trp Cys Ala Gly Tyr Cys
127 20 25 30
129 Tyr Thr Arg Asp Leu Val Tyr Lys Asp Pro Ala Arg Pro Asn Ile Gln
130 35 40 45
132 Lys Thr Cys Thr Phe Lys Glu Leu Val Tyr Glu Thr Val Lys Val Pro
133 50 55 60
135 Gly Cys Ala His His Ala Asp Ser Leu Tyr Thr Tyr Pro Val Ala Thr
136 65 70 75 80
138 Ala Cys His Cys Gly Lys Cys Asn Ser Asp Ser Thr Asp Cys Thr Val
139 85 90 95
141 Arg Gly Leu Gly Pro Ser Tyr Cys Ser Phe Gly Asp Met Lys Glu
142 100 105 110
145 <210> SEQ ID NO: 5
146 <211> LENGTH: 92
147 <212> TYPE: PRT
148 <213> ORGANISM: Homo sapiens
150 <400> SEQUENCE: 5
151 Ala Pro Asp Val Gln Asp Cys Pro Glu Cys Thr Leu Gln Glu Asn Pro
152 1 5 10 15

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154 Phe Phe Ser Gln Pro Gly Ala Pro Ile Leu Gln Cys Met Gly Cys Cys
155           20           25           30
157 Phe Ser Arg Ala Tyr Pro Thr Pro Leu Arg Ser Lys Lys Thr Met Leu
158           35           40           45
160 Val Gln Lys Asn Val Thr Ser Glu Ser Thr Cys Cys Val Ala Lys Ser
161           50           55           60
163 Tyr Asn Arg Val Thr Val Met Gly Gly Phe Lys Val Glu Asn His Thr
164 65           70           75           80
166 Ala Cys His Cys Ser Thr Cys Tyr Tyr His Lys Ser
167           85           90
170 <210> SEQ ID NO: 6
171 <211> LENGTH: 111
172 <212> TYPE: PRT
173 <213> ORGANISM: Homo sapiens
175 <400> SEQUENCE: 6
176 Asn Ser Cys Glu Leu Thr Asn Ile Thr Ile Ala Ile Glu Lys Glu Glu
177 1           5           10           15
179 Cys Arg Phe Cys Ile Ser Ile Asn Thr Thr Trp Cys Ala Gly Tyr Cys
180           20           25           30
182 Tyr Thr Arg Asp Leu Val Tyr Lys Asp Pro Ala Arg Pro Lys Ile Gln
183           35           40           45
185 Lys Thr Cys Thr Phe Lys Glu Leu Val Tyr Glu Thr Val Arg Val Pro
186           50           55           60
188 Gly Cys Ala His His Ala Asp Ser Leu Tyr Thr Tyr Pro Val Ala Thr
189 65           70           75           80
191 Gln Cys His Cys Gly Lys Cys Asp Ser Asp Ser Thr Asp Cys Thr Val
192           85           90           95
194 Arg Gly Leu Gly Pro Ser Tyr Cys Ser Phe Gly Glu Met Lys Glu
195           100          105          110
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201 <211> LENGTH: 96
202 <212> TYPE: PRT
203 <213> ORGANISM: mammalian
205 <400> SEQUENCE: 7
206 Phe Pro Asp Gly Glu Phe Thr Met Gln Gly Cys Pro Glu Cys Lys Leu
207 1           5           10           15
209 Lys Glu Asn Lys Tyr Phe Ser Lys Leu Gly Ala Pro Ile Tyr Gln Cys
210           20           25           30
212 Met Gly Cys Cys Phe Ser Arg Ala Tyr Pro Thr Pro Ala Arg Ser Lys
213           35           40           45
215 Lys Thr Met Leu Val Pro Lys Asn Ile Thr Ser Glu Ala Thr Cys Cys
216           50           55           60
218 Val Ala Lys Ala Phe Thr Lys Ala Thr Val Met Gly Asn Ala Arg Val
219 65           70           75           80
221 Glu Asn His Thr Glu Cys His Cys Ser Thr Cys Tyr Tyr His Lys Ser
222           85           90           95
228 <210> SEQ ID NO: 8
229 <211> LENGTH: 111
230 <212> TYPE: PRT

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231 <213> ORGANISM: mammalian
233 <400> SEQUENCE: 8
234 Asn Ser Cys Glu Leu Thr Asn Ile Thr Ile Thr Val Glu Lys Glu Glu
235   1           5           10           15
237 Cys Asn Phe Cys Ile Ser Ile Asn Thr Thr Trp Cys Ala Gly Tyr Cys
238           20           25           30
240 Tyr Thr Arg Asp Leu Val Tyr Lys Asp Pro Ala Arg Pro Asn Ile Gln
241           35           40           45
243 Lys Thr Cys Thr Phe Lys Glu Leu Val Tyr Glu Thr Val Lys Val Pro
244           50           55           60
246 Gly Cys Ala His His Ala Asp Ser Leu Tyr Thr Tyr Pro Val Ala Thr
247   65           70           75           80
249 Glu Cys His Cys Gly Lys Cys Asp Ser Asp Ser Thr Asp Cys Thr Val
250           85           90           95
252 Arg Gly Leu Gly Pro Ser Tyr Cys Ser Phe Ser Glu Met Lys Glu
253   100           105           110
256 <210> SEQ ID NO: 9
257 <211> LENGTH: 96
258 <212> TYPE: PRT
259 <213> ORGANISM: mammalian
261 <400> SEQUENCE: 9
262 Phe Pro Asp Gly Glu Phe Thr Met Gln Gly Cys Pro Glu Cys Lys Leu
263   1           5           10           15
265 Lys Glu Asn Lys Tyr Phe Ser Lys Pro Asp Ala Pro Ile Tyr Gln Cys
266           20           25           30
268 Met Gly Cys Cys Phe Ser Arg Ala Tyr Pro Thr Pro Ala Arg Ser Lys
269           35           40           45
271 Lys Thr Met Leu Val Pro Lys Asn Ile Thr Ser Glu Ala Thr Cys Cys
272           50           55           60
274 Val Ala Lys Ala Phe Thr Lys Ala Thr Val Met Gly Asn Val Arg Val
275   65           70           75           80
277 Glu Asn His Thr Glu Cys His Cys Ser Thr Cys Tyr Tyr His Lys Ser
278           85           90           95
284 <210> SEQ ID NO: 10
285 <211> LENGTH: 111
286 <212> TYPE: PRT
287 <213> ORGANISM: mammalian
289 <400> SEQUENCE: 10
290 Arg Ser Cys Glu Leu Thr Asn Ile Thr Ile Thr Val Glu Lys Glu Glu
291   1           5           10           15
293 Cys Ser Phe Cys Ile Ser Ile Asn Thr Thr Trp Cys Ala Gly Tyr Cys
294           20           25           30
296 Tyr Thr Arg Asp Leu Val Tyr Lys Asp Pro Ala Arg Pro Asn Ile Gln
297           35           40           45
299 Lys Ala Cys Thr Phe Lys Glu Leu Val Tyr Glu Thr Val Lys Val Pro
300           50           55           60
302 Gly Cys Ala His His Ala Asp Ser Leu Tyr Thr Tyr Pro Val Ala Thr
303   65           70           75           80
305 Glu Cys His Cys Gly Lys Cys Asp Arg Asp Ser Thr Asp Cys Thr Val

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306          85          90          95
308 Arg Gly Leu Gly Pro Ser Tyr Cys Ser Phe Ser Asp Ile Arg Glu
309          100          105          110
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313 <211> LENGTH: 108
314 <212> TYPE: PRT
315 <213> ORGANISM: Homo sapiens
317 <400> SEQUENCE: 11
318 Asn Ser Cys Glu Leu Thr Asn Ile Thr Ile Ala Ile Glu Lys Glu Glu
319 1          5          10          15
321 Cys Arg Phe Cys Ile Ser Ile Asn Thr Thr Trp Cys Ala Gly Tyr Cys
322          20          25          30
324 Tyr Thr Arg Asp Leu Val Tyr Lys Asp Pro Ala Arg Pro Lys Ile Gln
325          35          40          45
327 Lys Thr Cys Thr Phe Lys Glu Leu Val Tyr Glu Thr Val Arg Val Pro
328          50          55          60
330 Gly Cys Ala His His Ala Asp Ser Leu Tyr Thr Tyr Pro Val Ala Thr
331 65          70          75          80
333 Gln Cys His Cys Gly Lys Cys Asp Ser Asp Ser Thr Asp Cys Thr Val
334          85          90          95
336 Arg Gly Leu Gly Pro Ser Tyr Cys Ser Phe Gly Glu
337          100          105
340 <210> SEQ ID NO: 12
341 <211> LENGTH: 109
342 <212> TYPE: PRT
343 <213> ORGANISM: Homo sapiens
345 <400> SEQUENCE: 12
346 Asn Ser Cys Glu Leu Thr Asn Ile Thr Ile Ala Ile Glu Lys Glu Glu
347 1          5          10          15
349 Cys Arg Phe Cys Ile Ser Ile Asn Thr Thr Trp Cys Ala Gly Tyr Cys
350          20          25          30
352 Tyr Thr Arg Asp Leu Val Tyr Lys Asp Pro Ala Arg Pro Lys Ile Gln
353          35          40          45
355 Lys Thr Cys Thr Phe Lys Glu Leu Val Tyr Glu Thr Val Arg Val Pro
356          50          55          60
358 Gly Cys Ala His His Ala Asp Ser Leu Tyr Thr Tyr Pro Val Ala Thr
359 65          70          75          80
361 Gln Cys His Cys Gly Lys Cys Asp Ser Asp Ser Thr Asp Cys Thr Val
362          85          90          95
364 Arg Gly Leu Gly Pro Ser Tyr Cys Ser Phe Gly Glu Met
365          100          105
368 <210> SEQ ID NO: 13
369 <211> LENGTH: 110
370 <212> TYPE: PRT
371 <213> ORGANISM: Homo sapiens
373 <400> SEQUENCE: 13
374 Asn Ser Cys Glu Leu Thr Asn Ile Thr Ile Ala Ile Glu Lys Glu Glu
375 1          5          10          15
377 Cys Arg Phe Cys Ile Ser Ile Asn Thr Thr Trp Cys Ala Gly Tyr Cys

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VERIFICATION SUMMARY

PATENT APPLICATION: US/09/928,198

DATE: 08/23/2001

TIME: 14:41:06

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L:12 M:271 C: Current Filing Date differs, Replaced Current Filing Date